FULTON COUNTY PURCHASING DEPARTMENT

Winner 2000- 2005 Achievement of Excellence in Procurement Award
National Purchasing Institute

Jerome Noble, Director

July 31, 2006

RE: **#06ITB51556K-RS, Stonewall Tell Rd. Over Camp Creek Bridge Replacement**

Dear Bidders:

Attached is one (1) copy of Addendum 1, hereby made a part of the above referenced Invitation to Bid (ITB).

Except as provided herein, all terms and conditions in the bid referenced above remain unchanged and in full force and effect.

Sincerely,

Rholanda M. Stanberry

Chief Assistant Purchasing Agent

130 Peachtree Street, S.W. · Suite 1168 · First Floor · Atlanta, Georgia 30303-3459 · Telephone (404) 730-5800

This Addendum forms a part of the contract documents and **modifies** the original ITB documents as noted below:

ACKNOWLEDGEMENT OF ADDENDUM NO. 1

The undersigned bidder acknowledges receipt of this addendum by returning one (1) copy of this form with the proposal package to the Purchasing Department, Fulton County Public Safety Building, 130 Peachtree Street, Suite 1168, Atlanta, Georgia 30335 by the ITB due date and time **Monday, August 7, 2006 no later than 11:00 A.M.**

This is to acknowledge receipt of Addendum No. 1, _____ day of _____, 2006.

_____
Legal Name of Bidder

_____
Signature of Authorized Representative

_____
Title

Addendum No. 1

1. Under SECTION XI PRICE QUOTE:

   Replace Pay Item 310-1101; Total Qty of 1600 with Total Qty of 1800

   Replace Pay Item 402-3131; Total Qty of 350 with Total Qty of 320

   Replace Pay Item 413-1000; Total Qty of 300 with Total Qty of 310

   Replace Pay Item 165-0010; Total Qty of 100 with Total Qty of 400

   Replace Pay Item 171-0010; Total Qty of 200 with Total Qty of 800

   Replace Pay Item 500-3002; Total Qty of 74 with Total Qty of 73

   Replace Pay Item 511-1000; Total Qty of 9638 with Total Qty of 9270

   Replace Pay Item 520-5000; Total Qty of 164 with Total Qty of 161

2. The Bridge Foundation Investigation Report is attached for reference.

BRIDGE FOUNDATION INVESTIGATION

STONEWALL TELL ROAD BRIDGE REPLACEMENT OVER CAMP CREEK

GENERAL INFORMATION

Location / Description

This project is for the bridge replacement on Stonewall Tell Road over Camp Creek in Fulton County, Georgia. The proposed project will include the demolition of the existing bridge and the construction of a new (longer) bridge along the same alignment. The new bridge will be 170 feet in length with 4 intermittent bents spaced 30 to 40 feet apart.

Geology

The subject site is located within the Piedmont geological province. According to the "Geology of the Greater Atlanta Region" by McConnell and Abrams, 1984, the site is generally underlain by the Clairmont Formation. The Clairmont Formation generally consists of interlayered medium-grained biotite-plagioclase gneiss and fine to medium grained hornblende-plagioclase amphibolite.

Subsurface Conditions

Four soil test borings were drilled along the proposed bridge alignment at stations 114+00, 114+25, 115+30 and 115+70. The borings encountered previously placed fill material, alluvium, residual soils, partially weathered rock and auger refusal materials.

Existing fill material was encountered at each boring location to depths ranging from 13 to 18 feet below the existing ground surface. The sampled fill material was generally described as sandy silt, sandy clay, silty sand or clayey sand with standard penetration resistance values ranging from 4 to 15 blows per foot (bpf) with typical values between 5 and 10 bpf.

Alluvial (water deposited) soils were encountered beneath the existing fill at each boring location. The alluvial soils ranged from 10 to 15 feet thick. The sampled alluvium was typically described as sandy clay or sand with standard penetration resistance values ranging from the weight of hammer to 26 blows per foot.

Residual soils were encountered beneath the alluvium at Station 114+25 at a depth of 25 feet below the ground surface. The sampled residuum was described as silty sand with a standard penetration resistance value of 48 blows per foot.

GENERAL INFORMATION (CONTINUED)

Subsurface Conditions (Cont.) Partially weathered rock was encountered at each location at depths ranging from 23 to 32 feet below the ground surface and extending to auger refusal. Auger refusal depths ranged from 31 to 45 feet below the ground surface.

To further assess the nature and continuity of the refusal material, rock coring was performed at the end bent locations (Stations 114+00 and 115+70) utilizing a NX-sized core barrel (2 1/8" I.D.). The rock was generally described as sound to slightly fractured biotite plagioclase gneiss with recoveries ranging from 79% to 97%, and rock quality designations (RQD) varying from 79% to 94%.

Groundwater Groundwater was encountered in all of the borings performed at depths ranging from 16 to 18 feet below the ground surface (approximate elevations ranging from 747.6 to 749.3 feet-MSL).

MAXIMUM PILE DESIGN LOADS

END BEARING = 100 %
FRICTION = 0 %

10 BP 42 = 55 Tons
12 BP 53 = 70 Tons
14 BP 73 = 96 Tons

FOUNDATION RECOMMENDATIONS

BENTS	DRILLED SHAFT (BEARING)	SPREAD FTG (BEARING)	PILE FOOTING (PILE TYPE)	PILE BENT (PILE TYPE)
1 through 6				BP

ELEVATIONS

BENT	LOCATION	GROUND SURFACE (ft-MSL)*	MINIMUM PILE TIP (ft-MSL)	ESTIMATED PILE TIP (ft-MSL)
1	114+12	766 (approx.)	732	727
2	114+42	766 (approx.)	729	729
3	114+72	745 (approx.)	730	730
4	115+12	744 (approx.)	730	730
5	115+52	765 (approx.)	734	734
6	115+82	765 (approx.)	733	733

* - Ground surface elevations at the Bent locations have been interpolated from the provided bridge profile and from the surveyed elevations of the Test Borings.

NOTES

Elevations Elevations indicated on the Test Boring Records in the Appendix of this Report are based on a survey completed by NOVA. The bench mark (BM) associated with this exploration is a brass disc set by the Core of Engineers on the existing bridge deck at an elevation of 765.61 feet-MSL.

PDO Driving resistance after Minimum Tip Elevations are achieved.

Waiting Period None required.

Theoretical Scour The theoretical scour line may be raised to Elevation 737 at Bents 2 through 5 because of the presence of scour resistant partially weathered rock that was encountered during our subsurface investigation.

Erosion The use of 24 inches of Type I riprap and filter fabric at the toe of slopes or endbents is recommended.

Pilot Holes Pilot Holes should be set up for H-piles at Bent 6 due to the close proximity of a sanitary sewer line. The diameter of the holes should be determined from the table given below. The holes should be filled with concrete to the top of the rock after the piles are driven.

Pile Size	Maximum Pilot Hole Size
10"	24"
12"	24"
14"	24"

NOTES (CONTINUED)

Points Pile points (APF Pruyn Point 75750 or the equivalent) are recommended for each pile to be driven to insure adequate penetration into partially weathered rock or rock. The use of points should be at the direction of the Engineer.

Pile Protection All H-piles and sway bracing shall be painted using Paint System VI. The paint shall conform to the specified system except that the top coat shall be black (Federal Standard No. 595, color 27040).

Sway Bracing May be required to resist lateral and transverse loads if the unsupported pile lengths are too great and to resist lateral loads during peak flood conditions.

Obstructions An existing sanitary sewer line is located near Bents 1 and 6 that may impact the planned construction. The contractor should remove these or other obstructions that may impact foundation installation.

Staged Construction Not anticipated as no new/additional fill is planned at the proposed abutments.

As-Built Foundation Information The as-built foundation information should be forwarded to the Geotechnical Engineering Bureau upon completion of the foundation system.

Special Problems It is recommended that all bridge approach slabs on this project be constructed in accordance with the notched detail on Georgia Standard 9017-R.

Prepared By Robert W. Archer, P.E.

Reviewed By _____
Randall L. Bagwell, P.E.
GA Reg. No. 26477

GEORGIA REGISTERED # 26477 PROFESSIONAL ENGINEER RANDALL L. BAGWELL

J.B. Trimble, Inc.
Fulton County Project Number T-234
Stonewall Tell Road over Camp Creek
Emergency Bridge Replacement

DRAWINGS & PROFILES

NOVA ENGINEERING and ENVIRONMENTAL, INC.

STONEWALL TELL ROAD EMERGENCY BRIDGE REPLACEMENT
AREA LOCATION PLAN

SCALE: Graphic

DRAWING: 2006013-1

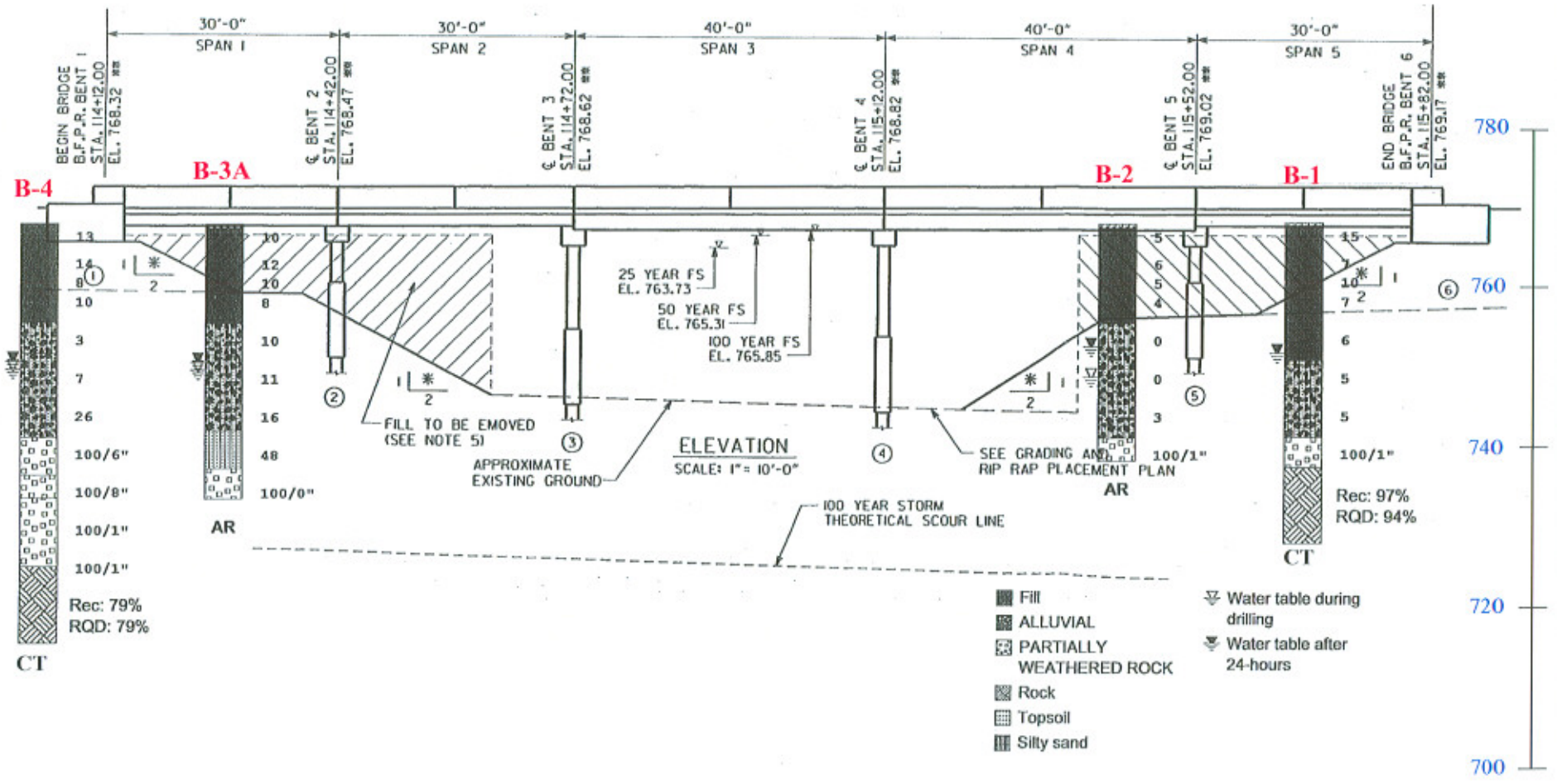
Prepared By:

NOVA ENGINEERING and ENVIRONMENTAL, INC.
3640 Kennesaw North Industrial Parkway, Suite E
Kennesaw, GA 30144

Prepared For:

JBT
J.B. Trimble

STONEWALL TELL ROAD EMERGENCY BRIDGE REPLACEMENT
SUBSURFACE PROFILE



SCALE: 1" ≈ 20'

DRAWING: 2006013-3

Prepared By:

NOVA ENGINEERING and ENVIRONMENTAL, INC.
3640 Kennesaw North Industrial Parkway, Suite E
Kennesaw, GA 30144

Prepared For:

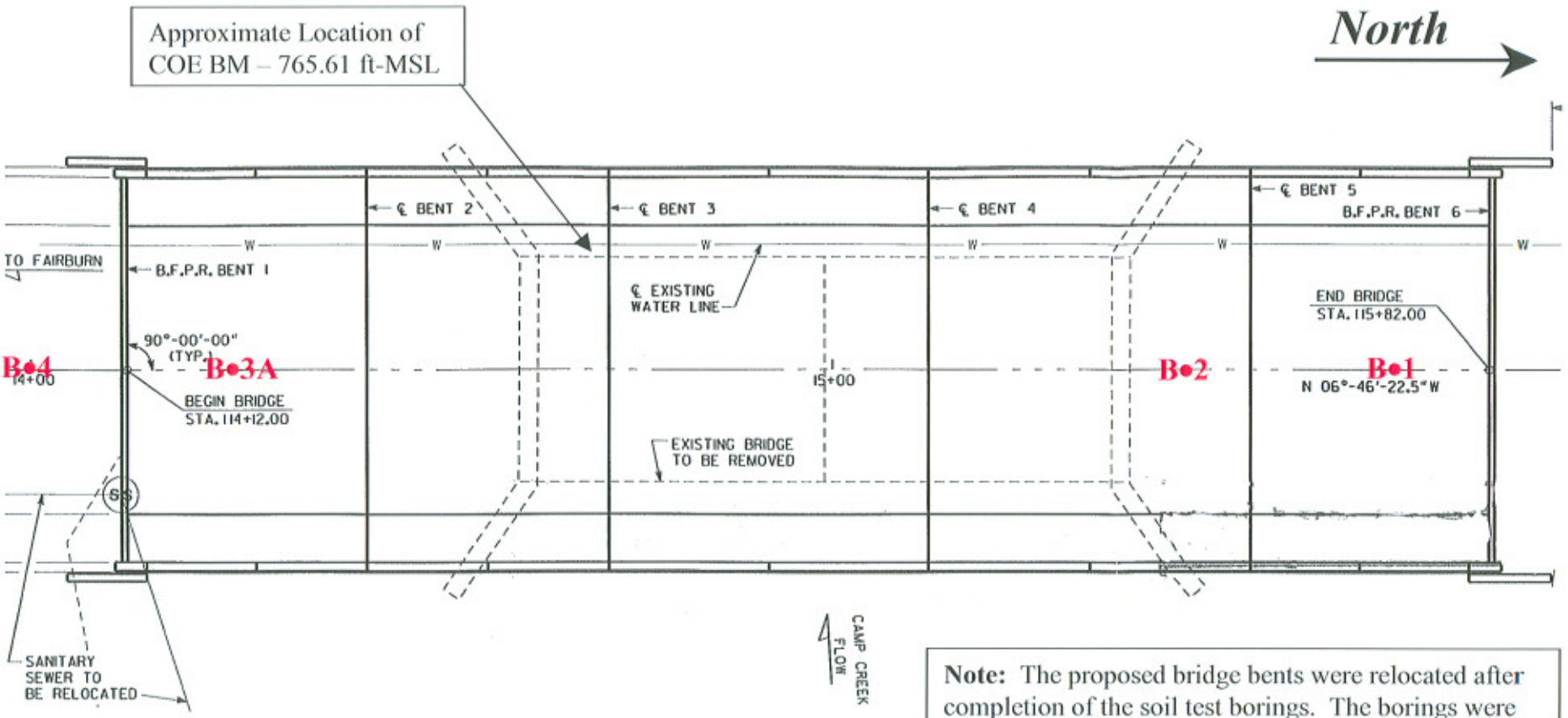
JBT J.B. Trimble

J.B. Trimble, Inc.
Fulton County Project Number T-234
Stonewall Tell Road over Camp Creek
Emergency Bridge Replacement

BORING RECORDS

NOVA ENGINEERING and ENVIRONMENTAL, INC.

STONEWALL TELL ROAD EMERGENCY BRIDGE REPLACEMENT
BORING LOCATION PLAN



Note: The proposed bridge bents were relocated after completion of the soil test borings. The borings were originally located in the immediate area of the planned bents.

SCALE: 1" ≈ 20'

DRAWING: 2006013-2

Prepared By:

NOVA ENGINEERING and ENVIRONMENTAL, INC.
3640 Kennesaw North Industrial Parkway, Suite E
Kennesaw, GA 30144

Prepared For:

JBT J.B. Trimble

NOVA ENGINEERING and ENVIRONMENTAL, INC.

SOIL TEST AND ROCK CORE RECORD B-1

PROJECT: Stonewall Tell Road Bridge **PROJECT NO.:** 2006013
CLIENT: J.B. Trimble, Inc.
PROJECT LOCATION: Stonewall Tell Road
LOCATION: Bent 6, Sta. 115+70 **ELEVATION:** 765.4 ft. -MSL
DRILLER: Piedmont Environmental Drilling **LOGGED BY:** R. Archer
DRILLING METHOD: Hollow Stem Auger **DATE:** 01-11-06
DEPTH TO - WATER> INITIAL: ▽ 17 **AFTER 24 HOURS:** ▽ 17 **CAVING>** ℄

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	Blow Counts
0	765	ASPHALT: 6 inches FILL: Stiff red brown medium to fine sandy CLAY				15
5	760	Loose tan brown clayey medium to fine SAND				7 10
10	755	Loose tan silty medium to fine SAND		▽		7 6
15	750	ALLUVIAL: Loose gray brown coarse to fine SAND				5
20	745					5
25	740	PARTIALLY WEATHERED ROCK: Sampled as very dense blue gray silty coarse to fine SAND with rock fragments				100/1"
30	735	Auger Refusal at 32 ft. White black medium strong, sound to slightly fractured, unweathered biotite plagioclase GNEISS with quartzite layers Rec: 97% RQD: 94%				
35	730					

Graphic Depiction

● BLOW COUNT
▲ NATURAL MOISTURE
PLASTIC LIMIT ⊢—⊣ LIQUID LIMIT
10 20 30 40 60 80

This information pertains only to this boring and should not be interpreted as being indicative of the site.

Elevations determined by survey based on COE BM noted on the Boring Location Plan.

NOVA ENGINEERING and ENVIRONMENTAL, INC.

SOIL TEST AND ROCK CORE RECORD B-1

PROJECT: Stonewall Tell Road Bridge **PROJECT NO.:** 2006013
CLIENT: J.B. Trimble, Inc.
PROJECT LOCATION: Stonewall Tell Road
LOCATION: Bent 6, Sta. 115+70 **ELEVATION:** 765.4 ft. -MSL
DRILLER: Piedmont Environmental Drilling **LOGGED BY:** R. Archer
DRILLING METHOD: Hollow Stem Auger **DATE:** 01-11-06
DEPTH TO - WATER> INITIAL: ▽ 17 **AFTER 24 HOURS:** ▽ 17 **CAVING>** ℄

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	Blow Counts	Graphic Depiction
40	725	White black medium strong, sound to slightly fractured, unweathered biotite plagioclase GNEISS with quartzite layers. Rec: 97% RQD: 94%					
		Rock Coring Terminated at 42 ft.					
45	720						
50	715						
55	710						
60	705						
65	700						
70	695						

Graphic Depiction: ● BLOW COUNT ▲ NATURAL MOISTURE
PLASTIC LIMIT ⊢—⊣ LIQUID LIMIT
10 20 30 40 60 80

This information pertains only to this boring and should not be interpreted as being indicative of the site.

Elevations determined by survey based on COE BM noted on the Boring Location Plan.

NOVA ENGINEERING and ENVIRONMENTAL, INC.

TEST BORING RECORD B-2

PROJECT: Stonewall Tell Road Bridge **PROJECT NO.:** 2006013
CLIENT: J.B. Trimble, Inc.
PROJECT LOCATION: Stonewall Tell Road
LOCATION: Bent 5, Sta. 115+45 **ELEVATION:** 765.3 ft. -MSL
DRILLER: Piedmont Environmental Drilling **LOGGED BY:** R. Archer
DRILLING METHOD: Hollow Stem Auger **DATE:** 01-11-06
DEPTH TO - WATER> INITIAL: ▽ 20 **AFTER 24 HOURS:** ▽ 16 **CAVING>** ⊥

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	Blow Counts
0	765	ASPHALT: 6 inches				
		FILL: Loose brown clayey medium to fine SAND with rock fragments				5
5	760					6
		Loose to very loose tan brown clayey medium to fine SAND				5
10	755					4
		ALLUVIAL: Very soft gray black brown fine sandy CLAY with organics		▽		0
15	750					
20	745			▽		0
		Very loose gray coarse to fine SAND				
25	740					3
		PARTIALLY WEATHERED ROCK: No sample recovered				
30	735					100/1"
		Auger Refusal at 31 ft.				
35	730					

Graphic Depiction

● BLOW COUNT
▲ NATURAL MOISTURE
PLASTIC LIMIT ⟷ LIQUID LIMIT
10 20 30 40 60 80

This information pertains only to this boring and should not be interpreted as being indicative of the site.

Elevations determined by survey based on COE BM noted on the Boring Location Plan.

NOVA ENGINEERING and ENVIRONMENTAL, INC.

TEST BORING RECORD B-3A

PROJECT: Stonewall Tell Road Bridge **PROJECT NO.:** 2006013
CLIENT: J.B. Trimble, Inc.
PROJECT LOCATION: Stonewall Tell Road
LOCATION: Bent 2, Sta. 114+25 **ELEVATION:** 765.6 ft. -MSL
DRILLER: Piedmont Environmental Drilling **LOGGED BY:** R. Archer
DRILLING METHOD: Hollow Stem Auger **DATE:** 01-11-06
DEPTH TO - WATER> INITIAL: ▽ 19 **AFTER 24 HOURS:** ▽ 18 **CAVING>** ⊏

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	Blow Counts
0	765	ASPHALT: 6 inches				
		FILL: Stiff orange brown slightly micaceous medium to fine sandy SILT				10
5	760	Medium dense to loose gray tan brown clayey medium to fine SAND				12
						10
10	755	Stiff gray black fine sandy CLAY with organics				8
		ALLUVIAL: Stiff blue gray medium to fine sandy CLAY				10
15	750	Medium dense gray brown coarse to fine SAND		▽		11
20	745					
25	740					16
		RESIDUAL: Dense gray tan silty medium to fine SAND (SM)				48
30	735					
		PARTIALLY WEATHERED ROCK: No sample recovered				
35	730					100/0"

Graphic Depiction

● BLOW COUNT
▲ NATURAL MOISTURE
PLASTIC LIMIT ⊢⊣ LIQUID LIMIT
10 20 30 40 60 80

This information pertains only to this boring and should not be interpreted as being indicative of the site.

Elevations determined by survey based on COE BM noted on the Boring Location Plan.

NOVA ENGINEERING and ENVIRONMENTAL, INC.

TEST BORING RECORD B-3A

PROJECT: Stonewall Tell Road Bridge **PROJECT NO.:** 2006013
CLIENT: J.B. Trimble, Inc.
PROJECT LOCATION: Stonewall Tell Road
P.I. NUMBER: Bent 2, Sta. 114+25 **ELEVATION:** 765.6 ft. -MSL
DRILLER: Piedmont Environmental Drilling **LOGGED BY:** R. Archer
DRILLING METHOD: Hollow Stem Auger **DATE:** 01-11-06
DEPTH TO - WATER> INITIAL: ▽ 19 **AFTER 24 HOURS:** ▽ 18 **CAVING>** ℄

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	Blow Counts	Graphic Depiction
							● BLOW COUNT ▲ NATURAL MOISTURE PLASTIC LIMIT ⊢—⊣ LIQUID LIMIT 10 20 30 40 60 80
		Auger Refusal at 36 ft.					
40	725						
45	720						
50	715						
55	710						
60	705						
65	700						
70	695						

Elevations determined by survey based on COE BM noted on the Boring Location Plan.

This information pertains only to this boring and should not be interpreted as being indicative of the site.

NOVA ENGINEERING and ENVIRONMENTAL, INC.

SOIL TEST AND ROCK CORE RECORD B-4

PROJECT: Stonewall Tell Road Bridge **PROJECT NO.:** 2006013
CLIENT: J.B. Trimble, Inc.
PROJECT LOCATION: Stonewall Tell Road
LOCATION: Bent 1, Sta. 114+00 **ELEVATION:** 765.8 ft. -MSL
DRILLER: Piedmont Environmental Drilling **LOGGED BY:** R. Archer
DRILLING METHOD: Hollow Stem Auger **DATE:** 01-11-06
DEPTH TO - WATER> INITIAL: ▽ 19 **AFTER 24 HOURS:** ▽ 18 **CAVING>** ℄

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	Blow Counts
0	765	FILL: Medium dense orange brown slightly micaceous medium to fine sandy SILT				13
5	760	Medium dense to loose brown gray slightly micaceous silty fine SAND				14, 8
10	755					10
15	750	ALLUVIAL: Very soft gray fine sandy CLAY				3
20	745	Loose to medium dense gray tan coarse to fine SAND		▽ ▽		7
25	740					26
30	735	PARTIALLY WEATHERED ROCK: Sampled as very dense gray tan brown silty medium to fine SAND				100/6"
35	730	Sampled as very dense tan brown silty medium to fine SAND				100/8"

Graphic Depiction

● BLOW COUNT
▲ NATURAL MOISTURE
PLASTIC LIMIT ⟷ LIQUID LIMIT
10 20 30 40 60 80

This information pertains only to this boring and should not be interpreted as being indicative of the site.

Elevations determined by survey based on COE BM noted on the Boring Location Plan.

NOVA ENGINEERING and ENVIRONMENTAL, INC.

SOIL TEST AND ROCK CORE RECORD B-4

PROJECT: Stonewall Tell Road Bridge **PROJECT NO.:** 2006013
CLIENT: J.B. Trimble, Inc.
PROJECT LOCATION: Stonewall Tell Road
LOCATION: Bent 1, Sta. 114+00 **ELEVATION:** 765.8 ft. -MSL
DRILLER: Piedmont Environmental Drilling **LOGGED BY:** R. Archer
DRILLING METHOD: Hollow Stem Auger **DATE:** 01-11-06
DEPTH TO - WATER> INITIAL: ▽ 19 **AFTER 24 HOURS:** ▽ 18 **CAVING>** ⊥

Depth (feet)	Elevation (ft-MSL)	Description	Graphic	Groundwater	Sample Type	Blow Counts	Graphic Depiction
40	725	Sampled as very dense tan brown silty medium to fine SAND				100/1"	● BLOW COUNT ▲ NATURAL MOISTURE PLASTIC LIMIT ⊢—⊣ LIQUID LIMIT 10 20 30 40 60 80
45	720	White black medium strong, sound, unweathered biotite plagioclase GNEISS with quartzite layers Rec: 79% RQD: 79%				100/1"	
50	715						
55	710	Rock Coring Terminated at 55 ft.					
60	705						
65	700						
70	695						

Elevations determined by survey based on COE BM noted on the Boring Location Plan.

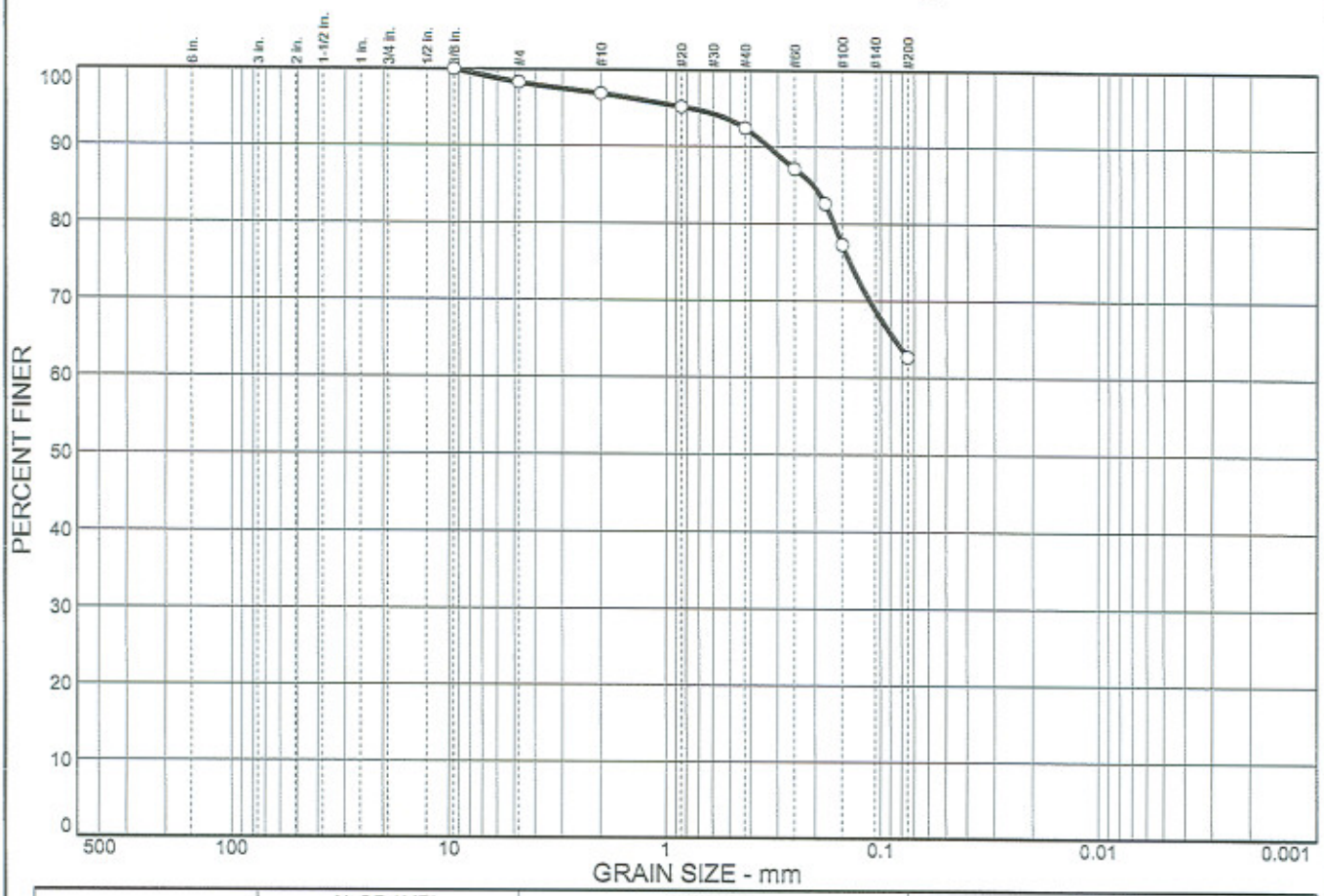
This information pertains only to this boring and should not be interpreted as being indicative of the site.

J.B. Trimble, Inc.
Fulton County Project Number T-234
Stonewall Tell Road over Camp Creek
Emergency Bridge Replacement

LABORATORY DATA

NOVA ENGINEERING and ENVIRONMENTAL, INC.

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	1.7	1.4	4.5	29.7	62.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	98.3		
#10	96.9		
#20	95.2		
#40	92.4		
#60	87.1		
#80	82.6		
#100	77.3		
#200	62.7		

* (no specification provided)

Soil Description

Red brown sandy CLAY

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.205 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= CL AASHTO=

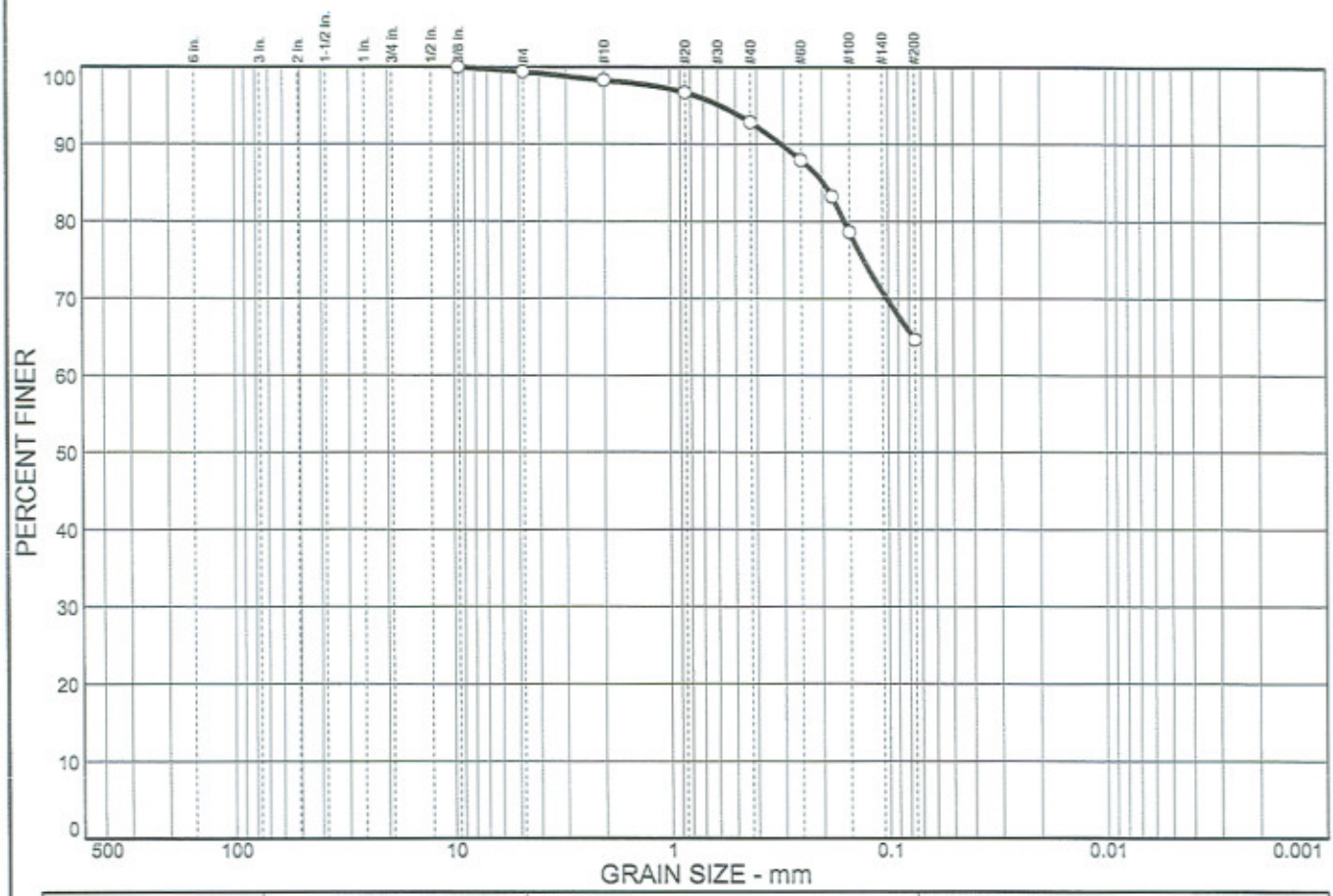
Remarks

Sample No.: 1 **Source of Sample:** B-1 **Date:** 01-24-06
Location: **Elev./Depth:** 0'-1.5'

NOVA ENGINEERING
Kennesaw, Georgia
770-425-0777

Client: J.B. Trimble
Project: Stonewall Tell Road Bridge Replacement
Project No: 2006013 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.6	1.1	5.5	28.1	64.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	99.4		
#10	98.3		
#20	96.7		
#40	92.8		
#60	87.9		
#80	83.2		
#100	78.6		
#200	64.7		

* (no specification provided)

Soil Description

Orange brown slightly micaceous sandy SILT

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.198 D_{60}= D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= ML AASHTO=

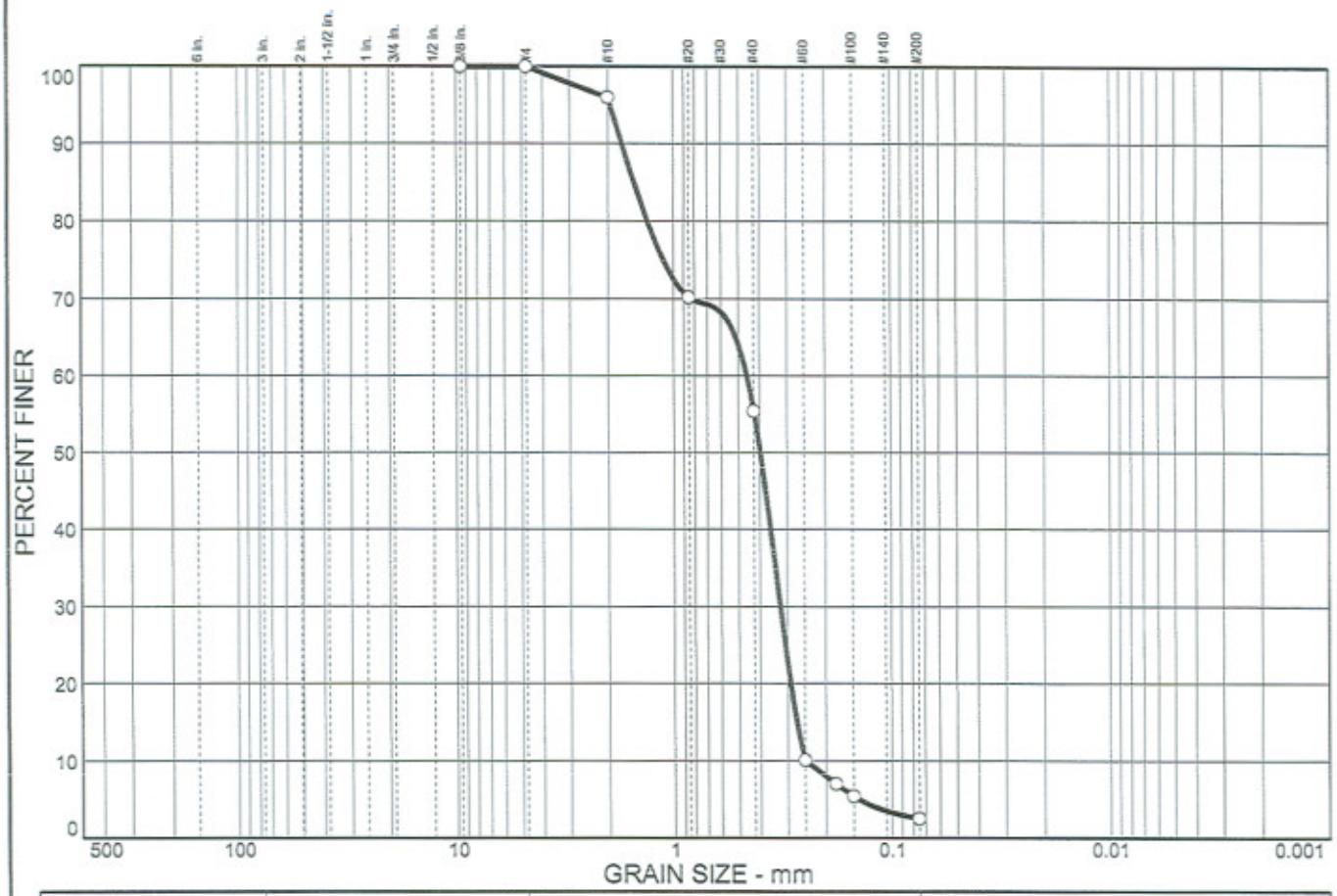
Remarks

Sample No.: 1 **Source of Sample:** B-3 **Date:** 01-24-06
Location: **Elev./Depth:** 0'-1.5'

NOVA ENGINEERING
Kennesaw, Georgia
770-425-0777

Client: J.B. Trimble
Project: Stonewall Tell Road Bridge Replacement
Project No: 2006013 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	4.0	40.6	52.9	2.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	100.0		
#10	96.0		
#20	70.2		
#40	55.4		
#60	10.1		
#80	7.0		
#100	5.4		
#200	2.5		

* (no specification provided)

Soil Description

Gray brown SAND

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 1.52 D_{60}= 0.457 D_{50}= 0.397
D_{30}= 0.323 D_{15}= 0.272 D_{10}= 0.247
C_u= 1.85 C_c= 0.92

Classification

USCS= AASHTO=

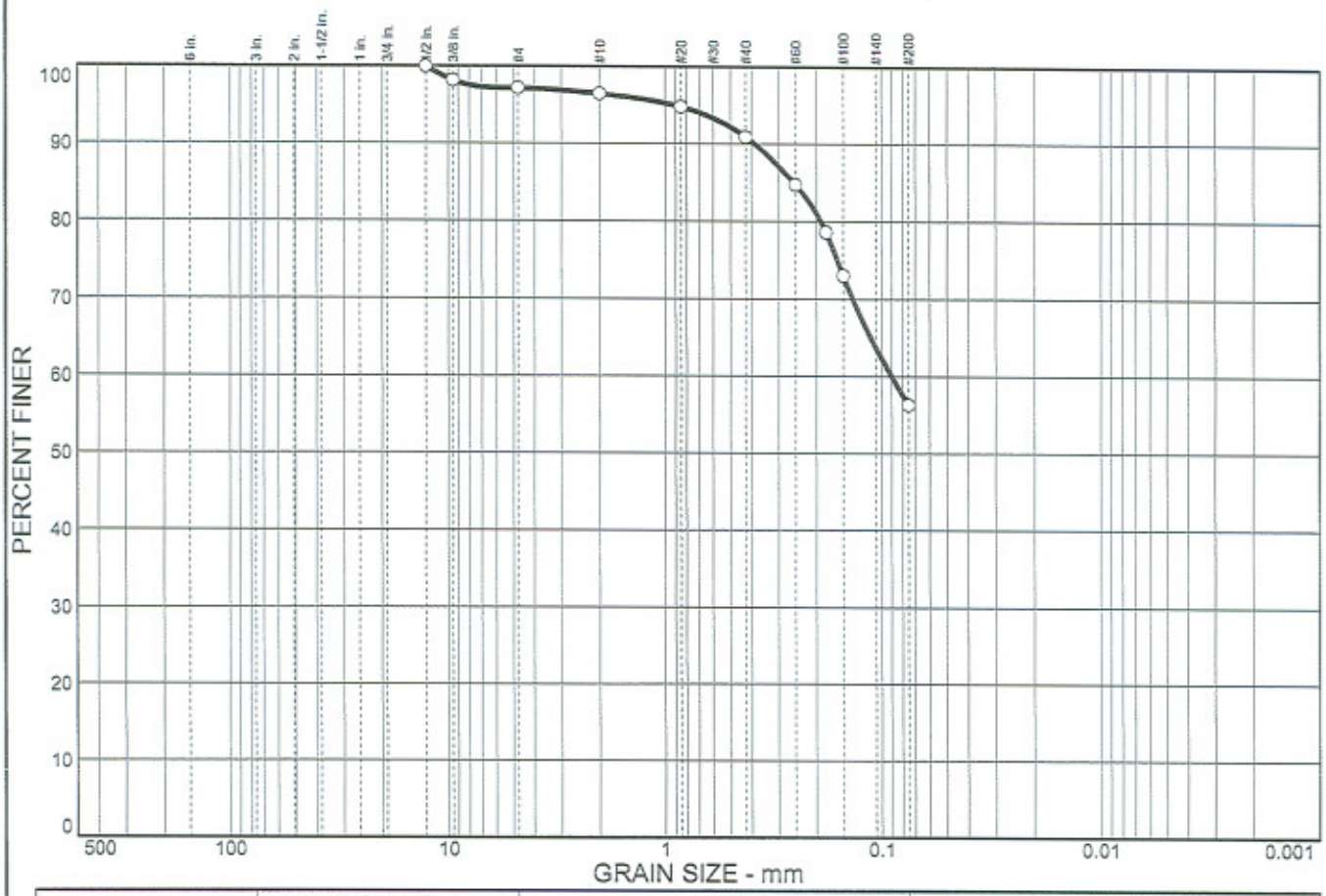
Remarks

Sample No.: 7 **Source of Sample:** B-3 **Date:**
Location: **Elev./Depth:** 23.5'-25'

NOVA ENGINEERING
Kennesaw, Georgia
770-425-0777

Client: J.B. Trimble
Project: Stonewall Tell Road Bridge Replacement
Project No: 2006013 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	2.8	0.7	5.6	34.6	56.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2 in.	100.0		
3/8 in.	98.2		
#4	97.2		
#10	96.5		
#20	94.8		
#40	90.9		
#60	84.7		
#80	78.6		
#100	73.0		
#200	56.3		

* (no specification provided)

Soil Description

Orange brown sandy SILT

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.256 D_{60}= 0.0896 D_{50}=
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

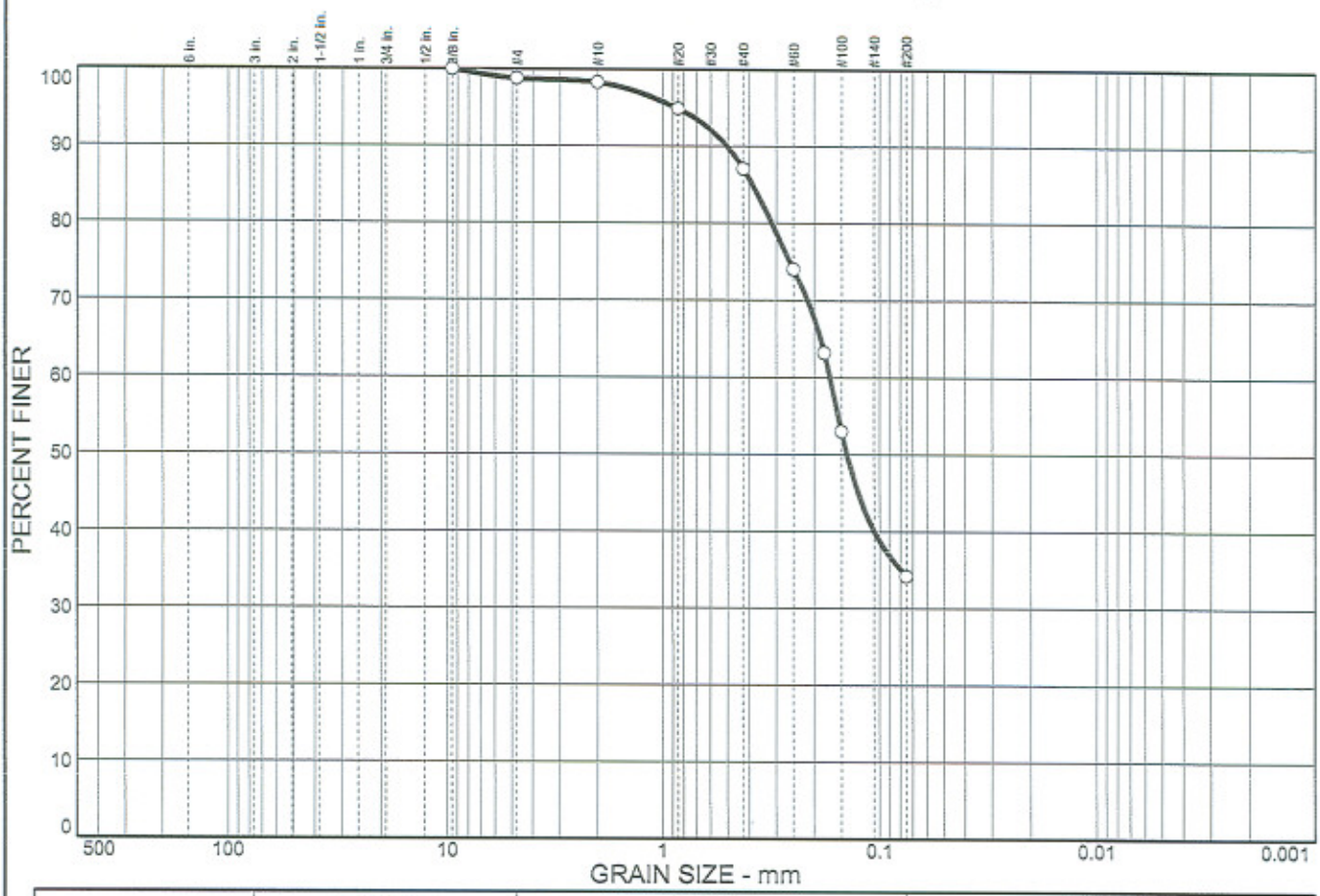
Sample No.: 1 **Source of Sample:** B-4 **Date:**
Location: **Elev./Depth:** 0'-1.5'

NOVA ENGINEERING
Kennesaw, Georgia
770-425-0777

Client: J.B. Trimble
Project: Stonewall Tell Road Bridge Replacement

Project No: 2006013 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	1.2	0.5	11.2	52.9	34.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	98.8		
#10	98.3		
#20	94.9		
#40	87.1		
#60	74.0		
#80	63.2		
#100	53.0		
#200	34.2		

* (no specification provided)

Soil Description

Brown gray slightly micaceous silty SAND

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.385 D_{60}= 0.170 D_{50}= 0.141
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

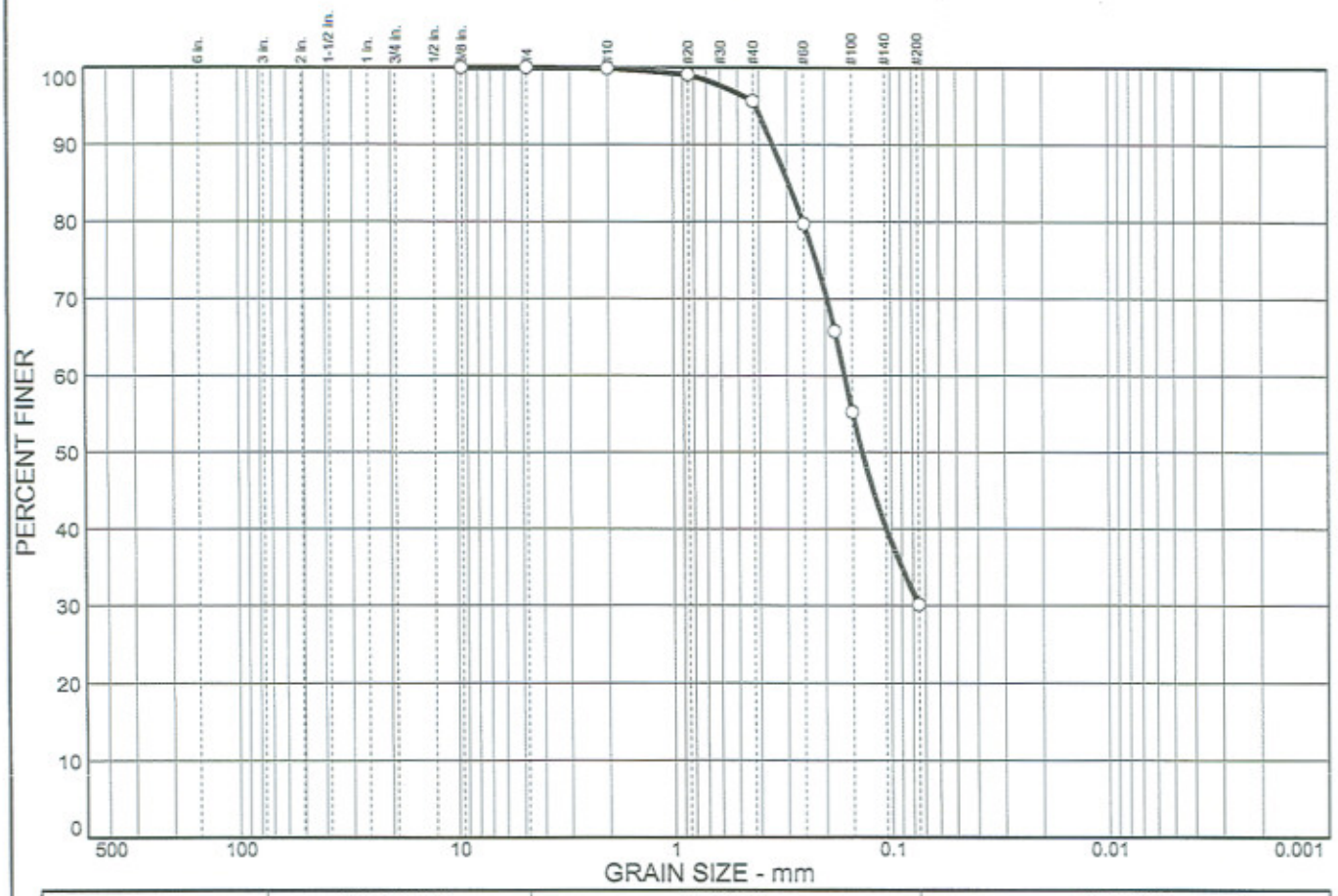
Sample No.: 4 **Source of Sample:** B-4 **Date:**
Location: **Elev./Depth:** 8.5'-10'

NOVA ENGINEERING
Kennesaw, Georgia
770-425-0777

Client: J.B. Trimble
Project: Stonewall Tell Road Bridge Replacement

Project No: 2006013 **Figure**

Particle Size Distribution Report



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.0	0.1	4.2	65.6	30.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8 in.	100.0		
#4	100.0		
#10	99.9		
#20	99.1		
#40	95.7		
#60	79.7		
#80	65.8		
#100	55.3		
#200	30.1		

* (no specification provided)

Soil Description

Tan brown silty SAND

Atterberg Limits

PL= LL= PI=

Coefficients

D_{85}= 0.294 D_{60}= 0.163 D_{50}= 0.135
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS= AASHTO=

Remarks

Sample No.: 9 **Source of Sample:** B-4 **Date:**
Location: **Elev./Depth:** 33.5'-35'

NOVA ENGINEERING
Kennesaw, Georgia
770-425-0777

Client: J.B. Trimble
Project: Stonewall Tell Road Bridge Replacement

Project No: 2006013 **Figure**

SUMMARY OF NATURAL MOISTURE CONTENTS
STONEWALL TELL ROAD BRIDGE REPLACEMENT
NOVA Project Number 2006013

LOCATION	SAMPLE DEPTH (FT)	NATURAL MOISTURE CONTENT (%)
B-1	0 – 1.5	22.3
B-1	8.5 – 10	27.7
B-1	13.5 – 15	8.7
B-2	6 – 7.5	21.7
B-2	8.5 – 10	20.1
B-3	0 – 1.5	20.9
B-4	0 – 1.5	26.5
B-4	8.5 – 10	25.1

NOVA ENGINEERING and ENVIRONMENTAL, INC.

J.B. Trimble, Inc.
Fulton County Project Number T-234
Stonewall Tell Road over Camp Creek
Emergency Bridge Replacement

PHOTOGRAPHS

NOVA ENGINEERING and ENVIRONMENTAL, INC.

STONEWALL TELL ROAD EMERGENCY BRIDGE REPLACEMENT
PHOTOGRAPH SUMMARY

Photograph 1: Stonewall Tell Road looking south at the existing bridge.

Photograph 2: East side of existing bridge.

Photograph 3: Pavement distress due to differential settlements of the end-fill and end-bents.

Photograph 4: Pavement distress due to differential settlements of the end-fill and end-bents.

Photograph 5: Erosion of slope adjacent to the eastern wing wall of the northern endbent.

Photograph 5: Erosion of roadway behind the western wing wall of the southern endbent.

STONEWALL TELL ROAD EMERGENCY BRIDGE REPLACEMENT
PHOTOGRAPH SUMMARY

Photograph 7: Existing Camp Creek stream channel looking east.

Photograph 8: Erosion of existing bank approximately 200 feet west of Stonewall Tell Road.

STONEWALL TELL ROAD EMERGENCY BRIDGE REPLACEMENT
PHOTOGRAPH SUMMARY

Photograph 9: Erosion of existing bank approximately 200 feet east of Stonewall Tell Road.